## We claim:

 A method of screening for an agent that reduces the appearance or formation of wrinkles, the method comprising:

providing a test agent;

determining whether the test agent increases or induces a component of the p21 signal transduction pathway; and

correlating the ability of a test agent to increase expression, activity or levels of a component of the p21 signal transduction pathway with the agent's ability to reduce the appearance or formation of wrinkles,

thereby screening for an agent that reduces the appearance or formation of wrinkles.

- The method of claim 1, further comprising evaluating the effect of the agent on wrinkles on the skin of a subject.
- The method of claim 1, further comprising selecting a test agent that increases expression, activity or levels of a component of the p21 signal transduction.
- The method of claim 1, wherein the determining step comprises determining if the test agent increases or induces p21.
- 5. The method of claim 1, wherein the test agent is selected from the group consisting of: an animal extract, a botanical extract, a fungal extract, a small molecule, a protein, a lipid, and a nucleic acid.
  - 6. The method of claim 1, wherein the determining step comprises:
- (a) providing a cell, tissue or non-human subject comprising an exogenous nucleic acid comprising a regulatory region of a component of the p21 signal transduction pathway operably linked to a nucleotide sequence encoding a reporter polypeptide; and
- (b) evaluating the ability of the test agent to increase the activity of the reporter polypeptide in the cell, tissue or non-human subject,

wherein the test agent is determined to increase or induce a component of the p21 signal transduction pathway if it increases the activity of the reporter polypeptide.

- 7. The method of claim 4, wherein the determining step comprises:
- (a) providing a cell, tissue or non-human subject comprising an exogenous nucleic acid comprising a p21 regulatory region operably linked to a nucleotide sequence encoding a reporter polypeptide; and
- (b) evaluating the ability of the test agent to increase the activity of the reporter polypeptide in the cell, tissue or non-human subject,

wherein the test agent is determined to increase or induce p21 if it increases the activity of the reporter polypeptide.

- The method of claim 2, wherein the evaluating step comprises topically administering the agent to the skin of the subject.
  - 9. The method of claim 2, wherein the subject is an experimental animal.
  - 10. The method of claim 2, wherein the subject is a human.
- The method of claim 2, wherein the effect of the agent on UVB-induced wrinkles is evaluated.
  - 12. A method of preventing or treating wrinkles, the method comprising:
  - (a) identifying a subject in need of prevention or treatment of wrinkles; and
- (b) administering to the subject an agent that increases or induces a component of the p21 signal transduction pathway.
  - 13. The method of claim 12, wherein the agent is administered topically.
- The method of claim 12, wherein the component of the p21 signal transduction pathway is p21.

- The method of claim 12, wherein the subject has been or will be exposed to UVB radiation.
  - 16. A cosmetic composition comprising an agent that increases or induces p21.
- The cosmetic composition of claim 16, wherein the composition further comprises a cosmetic ingredient.
- 18. The cosmetic composition of claim 17, wherein the cosmetic ingredient is a fragrance.
- The cosmetic composition of claim 17, wherein the cosmetic ingredient is a sunscreen.

A method of providing a record, the method comprising:

providing a test agent;

determining whether the test agent increases or induces p21; and
generating a record that correlates the ability of the test agent to increase expression,
activity or levels of p21 with the agent's ability to reduce the appearance or formation of
wrinkles,

thereby providing a record.

20.

21. A method of providing wrinkle protection to a subject, said method comprising: supplying to the subject a composition that increases or induces a component of the a p21 signal transduction pathway; and

supplying to the subject instructions for using said composition to prevent or reduce wrinkles.

 The method of claim 20, wherein the component of the a p21 signal transduction pathway is p21.

- 23. The method of claim 21, wherein said instructions comprise directions to apply the composition to the skin prior to sun exposure.
- 24. The method of claim 21, wherein the composition further comprises a cosmetic ingredient.
  - 25. A kit for preventing wrinkles in a subject, said kit comprising: a composition comprising an agent that increases or induces a component of the p21 signal transduction pathway; and instructions for using the composition to prevent wrinkles.
- 26. The kit of claim 25, wherein said component of the a p21 signal transduction pathway is p21.
- The kit of claim 25, wherein said composition further comprises a cosmetic ingredient.
- The kit of claim 25, wherein said instructions comprise directions to apply said composition to the skin prior to sun exposure.